

QA43 – Sodium Needs for Tube Fed Children on PediaSure

QUESTION:

I have a tube fed child receiving 800 cc of PediaSure per day. The sodium content of the tube feeding is 300 mg but the estimated need for a one year old is 225 mg. Is the amount of sodium on the tube feeding too much?

ANSWER:

The Recommended Dietary Allowances 10th Edition, published in 1989, (p. 254), gives 1 mEq/kg body weight as a “more than satisfactory” sodium intake for healthy infants and young children (1 mEq sodium = 23 mg sodium).

Children who need more sodium include those with renal disorders which result in excessive excretion via urine, or those with chronic diarrhea, resulting in increased sodium losses. In children who need low energy diets, due to inactivity, it would be prudent to make sure that sodium intake is at least 1 mEq/kg/day (23 mg/kg/day).

PediaSure will meet the sodium needs of the majority of children, but may be inadequate for those who need less than 60 kcal/kg, as 60 ml PediaSure provides approximately 1 mEq or 23 mg sodium. In those cases, a small amount of table salt may be added to bring total Na content up to 1 mEq per kg body weight. 1 teaspoon salt provides 100mEq sodium (2300mg); 1/8 teaspoon salt provides 12.5 mEq sodium (287.5 mg); this is a reasonable sodium supplement for children who do not quite meet sodium needs with PediaSure.

For children with disorders causing excessive sodium excretion, one must use laboratory values (serum sodium, and urinary sodium excretion) to determine how much sodium supplement is needed.

References:

- 1) Pennington, Jean A.T.; Bowes and Church's Food Values of Portions Commonly Used, 16th Ed. p.286; JB Lippincott Co. Philadelphia, 1994.
- 2) Recommended Dietary Allowances, 10th Ed.; p 254; National Academy Press, Washington, DC 1989.